

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): An image forming apparatus, comprising:

a main section which includes a main-section connector;

a plurality of attachment units which are attached to said main section in a cascade arrangement, and each of which includes a controlled element; and

a line group which connects said main section with said plurality of attachment units, and which establishes communications between said main section and said controlled elements which are respectively disposed to said plurality of attachment units, wherein

said line group includes signal lines and selective control lines,

said signal lines connect said controlled elements in parallel with said main section, to thereby realize a communication between each one of said controlled elements and said main section, and

said selective control lines connect said main section respectively with said attachment units, to thereby select one of said attachment units to which said main section is to communicate,

said plurality of attachment units at least includes a first attachment which is attached to said main section and a second attachment unit which is attached to said first attachment unit, said first attachment unit having a first controlled element, a first upstream-side connector and a

first downstream-side connector, said second attachment unit having a second controlled element, a second upstream-side connector and a second downstream-side connector,

a contact arrangement of said main-section connector is identical to that of said first downstream-side connector and that of said second downstream-side connector,

a contact arrangement of said first upstream-side connector is identical to that of said second upstream-side connector,

the contact arrangement of said main-section connector corresponds to that of said first upstream-side connector, thereby enabling said main-section connector to connect to said first upstream-side connector and to said second upstream-side connector, and also enabling said first downstream-side connector to connect to said second upstream-side connector,

said line group is electrically connected between said first attachment unit and said main section when said first upstream-side connector is connected to said main-section connector,

said line group is electrically connected between said second attachment unit and said first attachment unit when said second upstream-side connector is connected to said first downstream-side connector,

said main-section connector includes a first lower-contact point and a second lower-contact point, the first lower-contact point being wired to said selective control line for the first controlled element, the second lower-contact point being wired to said selective control line for the second controlled element,

said first upstream side connector includes a first upper-contact point and a second upper-contact point, the first upper-contact point corresponding to the first lower-contact point and being wired to the first controlled element,

said first downstream-side connector includes a third lower-contact point,

said second upstream-side connector includes a third upper-contact point which corresponds to the third lower-contact point and which is wired to the second controlled element,
and

internal wiring in said first attachment unit between the second upper-contact point and the third lower-contact point is shifted so that a position of the first upper-contact point in said first upstream-side connector is identical to a position of the third upper-contact point in said second upstream-side connector.

2. (currently amended): The image forming apparatus of claim 1, wherein said selective control lines are provided in accordance with a cascade connection count of said attachment units relative to said main section, the cascade connection count being the maximum number of said attachment units which can be controlled separately from said main section.

3. (currently amended): The image forming apparatus of claim 1, wherein ~~when said main section activates any one of said selective control lines, a current path is established via said signal lines between said main section and said controlled element which is disposed to said attachment unit which corresponds to thus activated selective control line~~

said second upstream-side connector further includes a fourth upper-contact point of which the position is identical to the second upper-contact point in said first upstream-side connector.

said second downstream-side connector further includes a fourth lower-contact point, and internal wiring in said second attachment unit between the fourth upper-contact point and the fourth lower-contact point is shifted so that a position of the fourth lower-contact point in said second downstream-side connector is identical to a position of the third lower-contact point in said first downstream-side connector.

4-7. (canceled).

8. (original): The image forming apparatus of claim 1, wherein said plurality of attachment units have the same function with each other.

9. (original): The image forming apparatus of claim 8, wherein said plurality of attachment units have the same structure with each other.

10. (currently amended): The image forming apparatus of ~~claim 4~~claim 1, wherein each one of said attachment units comprises a printed circuit board as a relay substrate on which an electric ~~substrate~~circuit is mounted, and

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said electric circuit includes said controlled element, is connected to said upstream-side connector with a group of straight cables, and is connected to said down-stream side connector with another group of straight cables.